

# AMATEUR RADIO

JUNE  
1950

JOURNAL OF THE WIRELESS INSTITUTE OF AUSTRALIA

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## EDITORIAL



### "UNITY IS STRENGTH"

The above is a very old and somewhat overworked saying, but nevertheless is a very true one.

It applies in all levels of society and equally so in Amateur Radio.

The Wireless Institute is very much aware of this fact and, such being the case, is making a very special attempt to enrol ALL licenced Amateurs, as well as other interested people, in our organisation.

A united Institute, with all Amateurs as members and a large associate membership, would become more powerful than it is at present, and would enable more privileges to be obtained for its members.

With this object in view, all members are earnestly request-

ed to endeavour to enrol as new members all non-member Amateurs and also any others interested in the amateur phase of radio with the necessary qualifications to become student or associate members.

You all have friends who are interested in Ham Radio, so why not try and obtain a new member for the Institute right now.

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For the benefit of Amateur Radio as a whole and, incidentally, each Amateur individually, do your bit and—

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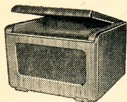
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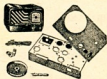
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# TRANQUIL BREAK-IN

By H. MORGAN,† A.M.I.R.E., and E. M. WADDLE,‡ VK4GZ

It will be readily conceded that the ultimate in operating convenience cannot be obtained with the monologue type of QSO which is in general use on the c.w. portions of the Ham bands.

The purpose of this article is to show that tranquil break-in is not a myth, but a reality. In the past, various attempts have been made to achieve this happy state at 4GZ but without success. A system was tried which employed r.f. pick-up and rectification fed to the grids of all r.f. tubes. This was not found to give complete cut off of the receiver, and the fast time constants necessary lead to instability.

For break-in to be successful, the receiver should be allowed to run while transmitting, and no clicks or thumps should be heard in the headphones.

Break-in consists, essentially, in keying the crystal oscillator or v.f.o., and biasing the remainder of the rig until each stage draws a small amount of plate current with the key in the up position. This helps considerably in the prevention of key clicks, as there is always a small load on each stage with the excitation removed.

For those who look with horror upon the idea of keying the oscillator stage, it can be completely shielded and a buffer or doubler stage keyed instead.

Here we would like to point out that if a "Clapp" Oscillator is built like a battleship, you can key it in the cathode without any clicks or chirps, and there is no necessity to use a keying filter—provided, and this is important, **choke input with a bleeder is used on all power supplies including the final**. (Here a receiver vibrator choke insulated from ground, was found to give adequate smoothing.) A small amount of standing plate current is present on all stages. With this set-up no clicks are recorded on the Ham bands, and Radio Australia can be listened to without interference on a b.c. set operating from the same power point, and placed along side the 100 watt rig. Prior to using choke input it was impossible to listen on that portion of the short wave band.

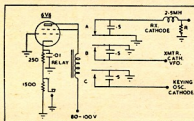
The system in use in the R.A.A.F. AT5/AR8 combination lifts the cathodes of all the r.f. and i.f. stages of the receiver while at the same time the cathodes of all the tubes in the transmitter are closed, and the antenna changed from the receiver to the transmitter. This was done by means of an antenna relay, the coil of which was energised by a 24 volt d.c. supply from a metal rectifier.

The type of antenna in use at 4GZ—ground plane with co-ax feed—precluded the use of this system of switching, and not enough contacts on existing d.p.d.t. relay, so another idea was worked out.

One drawback to relay keying is the necessity to have a source of d.c. for energising the coil. With the disposal types about, this means 24 volts. Keying this will result in sparking at the key. To obviate this, a 2,000 ohm P.M.G. relay was operated by the plate current of a triode connected 6V6 as shown in the diagram.

Overseas circuits for break-in usually specify a high resistance relay energised from the transmitter. This has two drawbacks. (1) A high ohmage sensitive relay is required, and is not readily obtainable cheaply. (2) If the relay is energised from the transmitter, the contacts breaking the receiver cathodes cannot be arranged to operate before the transmitter comes on the air.

The earth end of the resistor network in the cathode of the 6V6 (1,500 ohms) is sufficient to bias the tube close to cut off. When this resistance is shorted out by the key, the tube draws normal current, bias is supplied by the resistance and condenser in the normal cathode circuit.



R—See text for value.

Relay—P.M.G. type 2,000 ohm coil, adjust contacts so that contact A opens slightly before B closes.

The layout on the receiver side is a noise eliminator ahead of the receiver using push pull acorns, and four acorns in the front end of a double conversion job using three i.f. stages. (By virtue of triode mixer and oscillator in the converter section and low noise level mixer in the main receiver, its noise level is very low.)

One set of contacts on the relay opens a fraction of a second before another set closes, and this opens the cathodes of all the acorns and the mixer and the three i.f. stages (11 in all) of the main receiver. The closed contacts close the cathode of the "Clapp" oscillator in the transmitter. There is another set of contacts on the relay which keys a tone oscillator for keying monitoring purposes.

A separate antenna is used which is about 20 feet from the ground plane. The receiver is not shielded and is about a foot away from the transmitter.

The resistor R from the common cathode receiver line to ground should

be such that there is a potential difference of 20 volts between key up and key down conditions. The 0.5 uF. condensers are across the relay contacts to absorb any sparking which occurs on making and breaking the cathodes.

When resistor R is satisfactorily adjusted there is NO clicks or thumps in the receiver, only the sound of the tone oscillator. In case some doubting Thomas may think that the note from the tone oscillator would drown the sound of the clicks, we can assure them that with the tone oscillator disconnected, all that is heard is a s-s-s-s-sh sound in the headphones. A switch is incorporated to ground the cathodes for spotting purposes.

The h.t. supply for the 6V6 can be obtained from the same source of supply as that which supplies the keying oscillator.

With this system the operator can cease calling a station when he hears that the station has gone back to somebody else. Thus long calls and unnecessary QRM can be avoided. Also, if the station being worked is also equipped with break-in, he can interrupt the sender for a repeat, instead of waiting until the over is finished, and saying what did you say in the middle of the last over OM?

The only complaint that we have at 4GZ about the whole idea is the scarcity of stations whom are equipped to work complete break-in.

Don't forget fellows, if you hear a chap calling you and adding BK after his call, break him, even if you cannot work complete break-in, he will hear you and stop calling you, giving you the sign to go ahead. A little QRM will be avoided and in these days of overcrowded bands, even a little less QRM is worth while. Think it over, and give it a try. The system here has been going for the past months with complete success.

The transmitter at 4GZ is "Clapp" oscillator with 6J5, on 3.5 Mc. 1852 untuned isolator, 6L6 slug tuned buffer with seven switched crystals, which are never used now, 6F6 tuned 7 Mc. doubler, 807 14 mc. doubler and push pull 830Bs in the final. All power supplies are of the double section filter with choke input, and the plate of the osc. plate and screen of isolator is fed from VR105 regulator tube. As mentioned before, the cathode of the 6J5 is keyed through the relay.

The antenna is a ground plane made of 5/8th conduit and is fed through a co-ax line coupler (see A.R.R.L.), to the final.

In passing, we would like to hear of other Hams who use this antenna on 14 Mc. The conduit stands up very well and has been in use for two years now. Prior to the ground plane, a vertical J, also made of conduit, was in use, but a cyclonic disturbance brought it down.

The writers will be pleased to answer any queries either from 4GZ or by letter.

† Mill Street, Charters Towers, Qld.

‡ Aledue Street, Charters Towers, Qld.

# CRYSTAL FILTER S.S.S.C.

BY DR. LEO H. McMAHON,\* VK2AC

When anything new is introduced, one of the first things we say is what can I get out of it. In the case of s.s.s.c. the thing we do get is the effect of greatly increased power and with all respect to the decibel, the chap with the power gets the results.

In the case of a.m. we are allowed 100 watts input plus fifty watts of modulating power. This is shared between two side bands. In the case of single sideband, it is not difficult to get 80 watts in one side band which is the equivalent of an a.m. carrier power of 320 watts plus audio. It takes a lot of gear to get and modulate 320 watts of a.m. Another point is we take up very much less of the band and we occupy the band only while we are speaking.

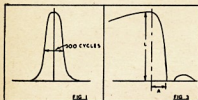


Fig. 1.—Condition of balance.

Fig. 3.—Condition of unbalance. This figure (3) also shows the response of the filter using two crystals of a frequency of 5180 Kc.

The last two points are general improvements for the value of all, but the first one is to our own good. What if you run two tubes Class B at 100 watts input unmodulated? You will get about 500 watts audio out in one side band. Use a beam with a 10 db gain and you have a signal equivalent to that of 20 kilowatts and are still inside the law. Looks good anyway, doesn't it? The article by VK7LE in "A.R." for July, 1949, sets out very well the advantages and disadvantages of s.s.s.c.

Two main systems of obtaining single sideband have been described in this magazine. That of VK7LE uses an audio

filter. For the ordinary chap, these filters are out of the question. The author was quoted £60 for one in Sydney and to make one is beyond the scope of most of us. The phasing system of VK4FN is even more difficult to get going as it is difficult to get the matched resistors and condensers. Moreover, the author cannot see how these will maintain their balance over time and weather changes.

A system with which we have had some experience is the use of crystal filters. A good description of the principle involved is given in the "Short Wave Magazine" for July, 1949, which is available in the W.I.A. libraries.

In simple terms, the principle is as follows: When we use the ordinary crystal filter of 455 Kc. for c.w. reception it has, when the stray capacities are balanced out by our phasing control, a symmetrical output with a bandwidth of about 300 cycles. It is only when we unbalance it by our phasing control that we get our rejection notch and we can put that notch on either side. As we decrease our response on one side, we increase it on the other. If instead of 455 Kc. with a bandwidth of 300 cycles, we use ten times that frequency we should have a bandwidth of 3,000 cycles which is all we want. Then by bringing our rejection notch in as close as we can to our reference frequency, we get a steep side and a sloping side. The nearer we bring our rejection notch the further we have to unbalance our phasing arm.

By putting two such filters in series we have a greatly increased effect and enough to enable us to wipe out one side band. We can wipe out our carrier with a balanced modulator.

Thus we have the system—

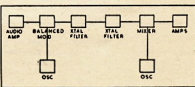


Fig. 2.

The frequency "a" from one side of the rejection notch to the top of the curve is about 400-600 cycles. The author has no means of measuring the db difference, but it is quite sufficient for Amateur purposes.

If we put our carrier about midway up the slope of the filter we will have a good response on one side band and on the other some response for the first 200-300 cycles and very little otherwise. The response to the first few hundred cycles can be decreased by using small value capacitances in the audio system.

The reason 5180 Kc. is used is because two of them were on hand. 5360 Kc. was first tried, but it was found that to get on 7 Mc., somewhere around 1750 Kc. had to be added, and the fourth harmonic of that fell into the 7 Mc. band and caused no end of trouble. Now 2 Mc. is fed in and that trouble is eliminated.

Referring to the filter section of the main diagram (Fig. 4) the crystal filters follow absolutely standard practice. They have low impedance inputs and outputs. Many variations of these filters can be made. The use of lower frequency crystals and the use of two in a band-pass circuit quickly come to mind. However, the author was interested in using components on hand and which could be easily duplicated.

The high frequency side band is used because to get the rejection notch on the low frequency side, the capacity of the phasing condensers had to be increased, whereas to get the low frequency sideband, one had to decrease the capacity of the phasing condensers. This always left a minimum capacity about which nothing can be done, and was not happy that the rejection notch was in as close as it could be got.

Using this principle, a s.s.s.c. transmitter has been built and put into operation and has given very satisfactory results. It uses nothing but junk parts, costs a minimum, needs very little lining up, and can be duplicated by anybody interested. The author is sure that it will be the standard type for Amateur use in the near future. If

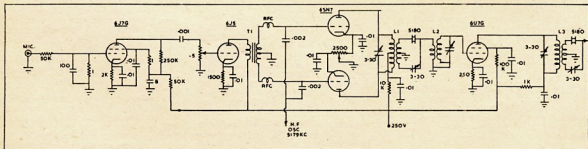


Fig. 4.—Diagram of two stage audio amplifier, balanced modulator and crystal filter single sideband stages. The present h.f. oscillator is a Clapp, to be replaced by a crystal oscillator on 5179 Kc.





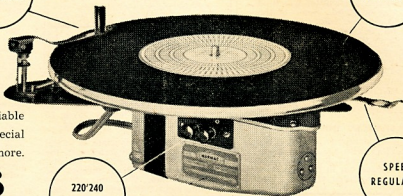
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# Abstracts from Overseas Magazines

## R.S.G.B. "BULLETIN," SEPTEMBER, 1949

P. 66: "A Six-Element Aerial Array for the V.H.F.s." F. Charnan, G6CJ, and H. E. Smith, G2HJ. The horizontal centred full-wave elements (i.e. six half-wave elements) with half-wave vertical spacing. Low angle radiation with broad horizontal pattern.

P. 67: "Correlation of Sporadic E Occurrence with Noise received on Two Metres." D. W. Heightman, G6DH.—Suggestion that Sporadic E clouds may be located by the direction of maximum noise on two metres.

P. 68: "A Noise Constructed Impedance Bridge;" D. P. C. Thackeray.—Three valve bridge can measure wide range of resistance, capacity, inductance and power factor.  
P. 72: "An inexpensive V.F.O. and Exciter Unit;" S. A. Denney, G3CJM.—Good conversion of TUGB tuning unit.

## R.S.G.B. "BULLETIN," NOVEMBER, 1949

P. 138: "Clipping-Filter Systems;" H. Whalley, G2HW.—Good discussion on what clippers can and can't do with hints on getting the most from them.  
P. 141: "A Crystal Checked Frequency Meter;" J. N. Walker, G5JZ.—Franklin V.F.O. with 100 Kc. check oscillator.

P. 150: "The President's Trophies Transmitters;" P. Pike, G2ENS.—Push pull grounded grid oscillator for 420 Mc. using two 3A/147K (CV82) triodes. Input 20 watts. The "President's Trophies" were for the first 420 Mc. contact between fixed stations, more than 25 miles apart and was won on 12th August, 1949.

## R.S.G.B. "BULLETIN," DECEMBER, 1949

P. 178: "Single Side-Band Transmission Applied to Amateur Telephony;" N. G. Hyde.—Part One, a review of s.s.b. transmission systems.  
P. 180: "The Design of Yagi Aerials;" J. H. W.—Optimum dimensions for Yagi's with various numbers of reflectors and directors.

P. 181: "A Portable Transmitter and Receiver;" A. O. Milne, G2ML.—Dry battery receiver and transmitter for 1.7 and 2.5 Mc.

P. 184: "Improving Receiver Sensitivity;" A. G. Wood, G5RZ.—50-cc. for 14 Mc.

P. 186: "Why Not a Windom?" E. Johnson, G2HR.—How to cut antenna and match single wire feeder for Windom antenna.

## "CQ," FEBRUARY, 1950

P. 10: "A Medium Power Transmitter of General Utility;" M. P. Johnson.—215 watts to 24 Mc.

P. 16: "A Slightly Different High Voltage Supply;" E. Black, W2ESQ.—Bridge rectifier circuit using 836 high vacuum rectifiers gives 2,500 v.

P. 18: "Putting Surplus to Work on the 420 Mc. Ham Band;" T. R. Davis.—Conversion of APQ-9 radar jammer. Originally operated between 500 and 700 Mc. using push pull 8013s.

P. 20: "A High Power Modulator for Mobile Operation;" G. M. Brown, W2CVV.—Class B 807 triodes driven by direct coupled cathode follower 6XN7. Lower standing drain, yet higher output than 6X7 Class B modulator.

P. 24: "Stabilising the V.F.O.;" C. A. West, W2IYG.—Stabilising the BC696.

P. 28: "Black and White;"—(i) Automatic sweeping receiver control. (ii) Key-controlled transmitter. (iii) Antenna tuner from BC375E. (iv) Spot frequency c.w.m.-n.b.f.m.

## "QST," FEBRUARY, 1950

P. 11: "A Solution to the Keyed V.F.O. Problem;" R. M. Smith, W1PTX.—Fundamental frequency of v.f.o. is one quarter of operating frequency. Amplifier after v.f.o. operated at low level and strictly Class A to eliminate fourth harmonic when harmonic amplifier is keyed.

P. 26: "Two Band Antenna-Matching Networks," Part III; J. G. Marshall, W0ARL.

## CAN YOU OBLIGE?

A letter is to hand from R. B. Monfries, of Zenag, via Lee, New Guinea, asking for details of the Receiver type BC348 series "O". If any reader can forward a complete circuit diagram, including values and voltages, he would be very grateful.

Unfortunately, when this type of receiver has been written up in overseas magazines, only sections of the circuit have been shown and he has been unable to get complete details.

P. 16: "A Simple Non-Directional Antenna for Ten Metres;" S. Becker, W7AYB.—Vertical J antenna.

P. 18: "Your BC221 as an Audio Signal Generator;" C. E. Vogt, W8NCO.—Uses audio beat at 1096 Kc. check point.

P. 19: "Eliminating TVI with Low Pass Filters;" G. Grammar, W1DF.

P. 27: "A Two-Metre Station for the Novice," Part I; the Receiver; E. P. Tilton, W1HDQ.—636 mixer-oscillator, 6AK5 first I.F. amplifier to feed communication receiver on 7.4 or 12.7 Mc.

P. 38: "Hints and Kinks;"—(i) Combined output control and screen protection circuit. (ii) Another neutralising kink for 813s. (iii) Sockets for 15E tubes.

P. 34: "Technical Topics;"—(i) Re Half Wave Filters. (ii) Gimmicks and Gadgets.

## "SHORT WAVE MAGAZINE," JANUARY, 1950

P. 818: "Band Switch QRO Transmitter;" J. N. Walker, G5JZ.—Uses standard British components with 813 final.

P. 828: "Suppression of TVI," Part II; F. T. Wilson, G2XX.

P. 832: "Experiments with Scale Model Aerials;" F. C. Judd, G2BCX.—Measurements of gain and radiation pattern for 144 Mc. models of more than 30 types of aerials used on lower frequency bands.

P. 839: "Better Clapp Oscillator;" R. S. J. Smith, G2DCL.—Constant output with increased frequency coverage by adding a small ganged condenser from the top of the coil to earth.

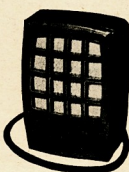
P. 841: "Country List by Prefixes."

P. 851: "The Versatile BC357;" V. J. Copley May, G3AAG.—Marker beacon receiver which operates a very sensitive relay on receiving a modulated signal.

P. 853: "Modulating the Screen;" H. J. Beach, GMSBO.

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# Rules of the Australian DX Century Club Award

## IONOSPHERIC PREDICTIONS FOR THE AMATEUR BANDS

JUNE, 1950

Nine of the charts, prefixed by the letter "C" for Canberra, refer to forecasts for the South-Eastern Australian States. The remainder, prefixed by the letter "P" for Perth, are for Western Australia.

The Canberra charts refer to the following world zones:—

Zone	Region	Terminal
1	Western Europe	London
2	Mediterranean	Cairo
3	N.-West America	San Francisco
3a	N.-East America	New York
4	Central America	Barbados
5	South Africa	Johannesburg
6	Far East	Manila

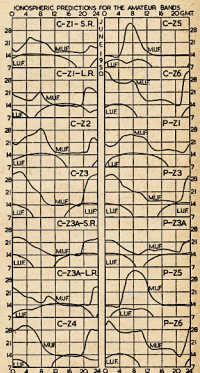
The Perth charts are similar to those based on Canberra.

### QUIZ

The Prediction Service welcomes comments on the accuracy of its predictions. In particular, answers to the following questions on the Canberra-San Francisco circuit would be useful:—

1. Were good conditions experienced on 7 Mc. for the period 0600 to 1400 hours G.M.T.?
2. Was the 14 Mc. band workable between 1000 and 1800 hours G.M.T.?
3. Was the 28 Mc. band workable for several hours around midnight G.M.T.?

Answers to the Quiz should be sent to the W.I.A. and should, if possible, refer to consistent results obtained on the majority of days in the months.



9. Each confirmation submitted must show the date of contact, type of emission used and the report. The band used and the address of the station is also desirable, but not necessarily essential.

10. Confirmations must be submitted exactly as received from the station contacted, and altered or forged confirmations will be grounds for disqualification.

11. Out-of-band operation used to contact a station will result in disqualification and be retrospective in the case of members.

12. All stations must be contacted from the same Australian call area and by the same licensee, although if the call sign is subsequently changed, contacts will be allowed if still within the original call area, and by original licensee.

13. Confirmations submitted which show both phone and c.w. reports may be accepted for both sections if the dates of each contact is shown, and emission is indicated.

14. Should a country be deleted from the Official Countries List at any time, members and intending applicants will be credited with such country if the date of contact is before the date of such deletion.

15. Certificates will be issued for "All Phone," "All C.W.," and "Open" contacts with a hundred countries, and stickers will be subsequently issued for each additional twenty countries confirmed over the one hundred.

16. Successful applicants will be listed monthly in "Amateur Radio." Subsequent to the first application, members must submit additional confirmations not less than five at any one time, for additional credit.

17. Applicants for membership shall be addressed to the "Federal Secretary, Box 2611W, G.P.O., Melbourne," and accompanied by sufficient postage for return by registered mail. Confirmations must also be accompanied by a list of claimed countries and stations, showing relevant details or explanation against stations where necessary.

18. Confirmations shall be examined by the Awards Committee, consisting of the Federal QSL Manager, the Federal Traffic Manager, and the Federal Secretary, who shall, if satisfied that the applicant is eligible for membership in accordance with these Rules, arrange for the member to be listed under the appropriate section in "Amateur Radio."

19. The decisions of the Awards Committee shall be final and binding in respect of any matter pertaining to these rules.

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## A.O.C.P. CLASS

The Victorian Division A.O.C.P. Class will commence on Thursday, 13th July, 1950. Lectures are held on Monday and Thursday evenings from 8 to 10 p.m. Persons desirous of being enrolled should communicate with Secretary W.I.A., Victorian Division, 191 Queen St., Melbourne (Phone FJ 6997 from 10 a.m. to 4 p.m.), or the Class Manager on either of the above evenings.



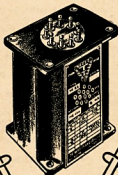
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# N.S.W. Div. North Coast Zone Convention at Urunga

By BOB LONG (VK2MM) and DAVE EVANS (VK2AYE)

After months of hard work and publicity on the part of the North Coast Zone Committee, the first rumblings of the good time to come were heralded by the arrival of VK2MM on the 29th March after working mobile on the trip with a No. 11. Bob qualified for the prize given to the first to arrive and unkind contemporaries claim that Bob, after a survey of the scene on arrival, decided to award a trophy for the event. Next on the scene was VK2KR, the world's champion yabby catcher, complete with a portable refrigerator (contents not divulged) and his stamping outfit for the comp. Immediately on arrival, Cec went into strenuous training for the event, but was disconcerted when told that other fellows had been putting in a bit of quiet practice at their home beaches. Cec then gave it away and retired to the "Do Me!" shack to conduct a fraternal with VK2ARY and VK2AAP who had arrived hard on his heels.

From this stage there was a continual show of hand-shaking, gum-lashing and ear-bashing as Hams converged on Urunga by train, truck, car and plane and had to be introduced to their earlier arrived friends. To adopt that trite and time honoured phrase—"among those present" were VKs 2AAM, 2AAN plus YL, 2AAP and YF, 2ACU and YF and brother-in-law, 2ADE, 2ADN, 2AEU, 2AEY and harmonic, 2AGD, 2AGM and YF, 2AHA, 2AJB, 2AJT, 2ALB, 2AMJ and father, 2ANA, 2ARJ, 2ARY, 2ASF, 2AWS, 2AWG, 2AYE, 2CM, 2DK and YF and harmonic, 2DX, 2EA, 2GI, 2IC and YF and family, 2JR, 2KA, 2KR, 2LH, and family, 2MM, 2OE, 2PA, 2RK and YF, 2TL and YF, 2UC, 2UY, 2WQ, 2WT, and YF, 2XO and YF and harmonic, 2XY, 2ZY, 4CU and YF, 4CZ and YF, 4ST, 4UX, 4TS, and 4XP.

Other visitors who contributed to the success of the "do" were Mr. Charles Eddy, Chairman of the Urunga Progress Association; Mr. Ted Hamey and YF, and the radio wonder boy (Ian), and Mr. Percy Sura, Superintendent, Belington Ambulance Station.

The North Coast Zone Committee wish to thank the townspeople of Urunga for their ready and willing co-operation in assuring the success of the Convention and, in particular, wish to convey their thanks to the following organisations, whose activities never left a dull moment throughout the holiday period:

Urunga Progress Association,  
Bellingen-Urunga Surf Club,  
Bellingen Shire Council and Chamber of Commerce,  
Bellingen River Am. Anglers Club,  
Urunga Football Club.

A special vote of thanks is due to the Gleeson brothers and their manager, Theo, whose particular job as hosts to the visitors at the Ocean View Hotel was accomplished with a cheerful demeanour and alacrity totally unknown in metropolitan hostilities. For the benefit of those who intend to make the trip next year, it may be mentioned

that the abovementioned gentlemen have reserved all the accommodation in the hotel for Hams and their friends. And it seems that Theo, after hearing 2AYE operating in his room in the hotel, has been bitten by the virus and is already on Crieff Retaillick's back for a Ham ticket!

A dismal report from Baron Hugo Stitt, 2WH, that the Forbes gang would be unable to attend the fest dampened spirits a little—according to Hugo, conditions were so bad that Army "ducks" were unable to battle against the swirling currents. Better luck next year, chaps. While on the subject of floods, mention should be made of the effort of 2ACU, who had to detour so much that he covered 630 miles to reach Urunga. For 18 miles of this distance in the flood areas, his truck was carried piggy-back on a huge Deisel tractor while Rod bemoaned the fact that he was unable to use his motor-scooter which he carried as secondary transport.

Good Friday was spent in getting acquainted and resting up after the trip in readiness for the strenuous programme which Crieff and his stalwarts had planned. The main item of interest on Good Friday was the arrival of the 18 water (two 9's in a common envelope) and its installation, with anxious care, into its appropriate rack assembly. 2DK had donated a spring lamb for the boys who were "batching" at the "Do Me!" shack and the job of folding it up to fit into the refrigerator was deputed to one Robert Long. Bob's efforts to carve dead mutton into succulent joints with a rusty, blunt fish knife earned him the title of "Mutton Mangler," of which he may be justifiably proud for no cannibal ever mangled a prospective victim more successfully or thoroughly.

## COMPETITIONS

The Convention proper commenced at 2 p.m. on Saturday when all Amateurs congregated at the "Do Me!" shack for registration and issue of identification discs. The unusual course was then followed of having all Amateurs announce their name, call sign and their particular pursuits in radio. The banana guessing competition, for a huge bunch of bananas, donated by Ted Hamey, the "Banana King" of Coffs Harbour, was won by 2WQ, who guessed the exact weight of 80 pounds. Entries ranged from 32 to 173 pounds and the result indicated good surveying on Bob's part. As a token of their esteem and to mark his success, the boys left him one banana on the stalk.

The code test at 20/25 w.p.m. was won by 4XP with a score of 75 out of 78, with 2JR a close second in the event.

In the voice identification test, 2PA, played back fifteen voices which he had recorded from QSOs on the 7 Mc. band. 2KR and 2AHA tied for first place. This success obviously indicates that these two boys are, at least, good listeners on 40 metres. Much to his chagrin, 2XO,

for the second year in succession, failed to pick his own voice in the recording.

Next event was the neutralisation of the 18 water—a task to which the boys, and some of the YFs, paid strict attention. The boys did their job nobly, but failed to achieve complete neutralisation and, as a punishment, were ordered to work back on the job that evening after lectures were completed.

Photographs then became the order of the day and quite a large number were taken. Joe Reed made a series of snaps, copies of which are now doing the rounds, and which can be obtained from Joe at a nominal cost and which provide a most attractive and pleasant memory of an eventful Convention.

## LECTURES IN THE EVENING

So to dinner, to fortify the inner man against the attacks of the lecturers who were billed to go "over the top" at 8 p.m. At this session, 2MM was the first lecturer and he rendered a masterly dissertation on "Characteristics, Uses and Abuses of Meters." He was followed by 2ADE, who discoursed on "The Conversion of the SCR522 to 50 and 144 Mc" in a manner which left no doubt that Charlie really knew the works. Next on the rostrum was 2EA, who managed to interpolate humour into his lecture in an enterprising way which did not detract from the interest in his talk on "Super Modulation." 2ADT, who was booked for a lecture on "Turret Tuned Receivers," was unable to be present due to illness in his family, and Jack's place was taken by 2ARJ who really did justice to a discussion on "Double Conversion in Receivers," which was notable for the fact that Jim had come totally unprepared to deliver a lecture and did not use any notes.

We take advantage of this opportunity to remind our lecturers that they promised to forward scripts and circuits of their lectures to 2AYE for publication in "Amateur Radio" and it would be much appreciated if the scripts could be forwarded as soon as possible to the Institute P.O. Box 1734, Sydney.

2AYE was then called upon to respond for the Council and Institute. In his remarks, Dave stressed the importance of loyalty to the Institute and the encouragement of the younger element in the study of Amateur Radio, the maintaining of the country Amateurs' interest and the desire of the Council to decentralise activities as much as possible. He complimented the North Coast Zone Amateurs on the accomplishment of what was possibly the most outstanding Ham event in the history of the Division and suggested that this was an appropriate time to appoint a working committee to commence organisation for the next Convention.

At this stage, 2JC, the able Chairman, got into his stride and within fifteen minutes a committee was elected and were "rarin' to go." Present aim of

the committee is to have 250 Amateurs at Urunga next Easter and at the time of writing, over sixty have signified their intention of attending. If you want to go, contact Criff Retallick as soon as possible or you'll be out of luck for accommodation. Next year's Urunga "do" will be the "best ever" as the "mutton mangler" expresses it: "bigger, better, breezier and brighter than ever."

### FAMOUS YABBIE CATCHER

Sunday, 9 a.m., saw the start of the great yabbie catching competition and the entire population of Urunga and their visitors were soon elbowing for standing room on the side lines while the competitors were nervously treading water with a few practice stamps and quietly jockeying for good positions. The champ, Cec Hardman, eyed them belligerently and picked himself a weed covered spot some twelve feet away from the upstarts who coveted his title.

On the signal from the judge, all competitors were rapidly stamping out a furious rumba, churning water and sand into a boiling maelstrom, to the accompaniment of clicking camera shutters and the derisive cheers of the harmonics who thought that the OM really had gone nuts this time.

When a halt was called, the exhausted title-seekers had not one solitary yabbie between them and Cec nonchalantly approached the judges and tossed at their feet ten emaciated and nearly defunct yabbies. Well, a yabbie, dead or alive, is a yabbie, so Cec was adjudged world's champion and was invested with his badge of title and presented with a beautiful miniature gold pot. While Cec was enjoying his brief moment of adulation his opponents, who suspected foul work and had ready memories of the portable refrigerator, decided that Cec had used last year's yabbies to take the title and in an irate, and none-too-gentle manner, seized the protesting champ, carried him out to deep water, and tossed him in to fraternise with his yabbies.

From 10 a.m. to noon a bus tour for the Hams, YLs and YFs was provided by the people of Urunga and a most enjoyable tour of the Bellinger River Valley followed. Those who could not find a foot-hold, retired to the "Do Me" shack to listen to the W.I.A. concert and compare notes.

### HIDDEN TRANSMITTER HUNT

At 2 p.m. the search for the hidden transmitter was organised. Unfortunately, there were only two entrants and this event was won by 2AYE who sat in the hotel lounge discussing matters of moment with 2JC, while 2ASF, who incidentally had never before handled 144 Mc. gear, went out and brought home the bacon. Good work, Col, and may you have that 832 in operation next year.

The beam used by 2AYE consisted of a 300 ohm telcon dipole with reflector and director spaced half wavelengths, the latter consisting of two pieces of quarter inch brass rod and horizontally polarised. The back-to-front ratio of this "stick and string special" is 26 db. Incidentally, the finish of the transmitter

search was dramatic, 2ASF locating the transmitter just about ten yards ahead of his rival 2AHA. Better luck next time, Harold. It is hoped that the Sydney V.H.F. Section and associated Clubs will send up a strong group next year. The Newcastle boys already claim that they have it all sewn up.

### PRESENTATION OF PRIZES

At 7.30 p.m. all hands retired to the School of Arts where, under the Chairmanship of 2JC, we received a speech of welcome from Mr. Charles Eddy, President of the Urunga Progress Association. In his remarks, Mr. Eddy stressed the good work done by Amateurs in times of distress and the pleasure that the townspeople derived from the fact that Urunga had been chosen as the scene of our Convention. He promised, in advance, to agree to turn over the town to the boys next Easter. Mr. Eddy's remarks were received in the usual enthusiastic manner.

The presentation of prizes was then commenced, the duty being ably performed by 2AAN, Hon. General Secretary of the Division. Complete presentation was as under:—

1. Banana weight guessing—Bob Wilkins, 2WQ.
2. Code test—1st: Jeff Thompson, 4XP; 2nd: Joe Reed, 2JR.
3. Voice identification—tie between Cec Hardman, 2KR, and Harold White, 2AHA.
4. Fishing competition—Bill Eagling, 2AEY.
5. First to arrive at Convention—Bob Long, 2MM.
6. Travelled longest distance to Convention—Rod Pike, 2ACU.
7. Hidden transmitter hunt—Dave Evans, 2AYE, who called up the real winner, Col Fletcher, 2ASF.
8. World's champion yabbie catcher, gold pot and certificate—Cec Hardman, 2KR.
9. Ear bashers' award—1st: Gordon Kempton, 2CI, subject "Be Kind To Horses," time 22 min. 35 secs.; 2nd: Joe Reed, 2JR, subject "The Joe Reed Oscillator," time 22 min. 34 secs.
10. Lucky number on registration disc—Gerry Chandler, 2ZS.
11. Lucky number on registration, ladies—YF of 2AAP, Mrs. Hart.
12. Lucky number on programme—Miss Lindsay Hewitt.
13. Certificate of commendation—Ian Hamey, Radio Wonder Boy.

A few remarks are justified in connection with the prize-giving. The prize for event No. 6 was 500 QSL cards, donated by that grand old friend of the boys, Ern Ashley, of North Bondi. Ern also donated 1,000 QSL cards for the prize in event No. 10, and the boys certainly appreciate your gesture Ern. Many thanks, old timer. Incidentally, to those hundreds of Hams who still have to attain that signal honour of a card from 2ZS, we suggest that you get on his back immediately. Gerry, at the time of writing, has never seen his name in print—except on police warrants and other blokes' cards.

Prize giving was followed by a demonstration by the radio wonder boy, four-year-old Ian Hamey. Joe Reed was

invited to draw any circuit on the blackboard and to question Ian regarding the components. Joe chose an old circuit of the 1930 vintage—the ST300 we believe—and the boy was able to answer all questions satisfactorily. His designations for some parts were not exactly the same as those in the "Designer's Handbook" but his replies definitely could be accepted as indicating a fair knowledge of components. 2ADN then described a power supply and leaving out an important connection, he asked Ian if the circuit would work. Ian laughed and said, "Of course not you forgot the centre tap in the secondary."

Next item was an hour of 16 mm. films by Ted Hamey. Ted is a photographer of note and his coloured documentaries have to be seen to be believed. As a show they rated as good as anything we have seen in the City, one in particular which described the activities of the banana growers should have a wider circulation.

The next item was the star show of the Convention and was a lecture by Joe Reed, 2JR, on "Model Radiator Investigations on Low-Angle Radiation." As is usual with Joe, his racy style of delivery and interpolated Ham style of humour, held the interest of the boys completely. At the conclusion of the lecture, a vote of thanks was accorded Joe by 2AYE and carried enthusiastically. One noteworthy point about all the lecturers at the Convention was that they did not introduce involved mathematical formulae—which always bore and rarely enlighten—but held the interest of their listeners by adapting Ham practice and keeping to phrases and terms which were readily understood and easily digested.

Before concluding this report we feel that mention must be made of the "mad hour"—1600 to 1700 hours on Sunday—when all the chaps with portable rigs teed up a "long distance contact contest" to publicise the Urunga Convention. As is usually the case with unofficial contests, nobody seemed to keep a log, nobody seemed to be quite sure whether the contest was on or not, so, just for the fun of it and to keep faith with the boys down south, who had promised their co-operation, a few of the chaps turned the 40 metre band into a madhouse for sixty minutes. 2AYE managed to contact Bondi, 2AAN beat him by ten miles by connecting with Sutherland and 2KR went out after XEs and Ws, only to find that somebody had "fixed" his automatic key for him. 2DK turned it in—the Urunga QRM was terrific. Anyhow fellows, it will be on next year—in earnest—properly organised and out in the field.

To the ladies who assisted in the Convention we extend our sincere thanks, they are so many that it is impossible to pick individuals. To the various Associations in the district who contributed to the pleasures of our stay, we say thanks a lot, folks, we liked it so much we'll be back for more next year, and to the chaps who organised the "do," well, we guess you know how the fellows feel about it. Well, that's it, blokes, just one more crack before we throw the big switch—we'll be seeing you at Urunga next Easter, for the biggest, brightest, breeziest, Convention ever.



Mr. R. H. Cunningham using the "750" at the Eddystone Ham Shack.

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MALVERN, VICTORIA

### Further Details from:—

<p><b>VICTORIA:</b> J. H. MAGRATH &amp; CO., 208 Little Lonsdale Street, Melbourne.</p> <p><b>WILLIAM WILLIS &amp; CO.,</b> 428 Bourke St., Melb.</p> <p><b>N.S.W.:</b> JOHN MARTIN PTY. LTD., 116-118 Clarence Street, Sydney.</p> <p><b>WESTERN AUST.:</b> CARLYLE &amp; CO. LTD., Hay St., Perth, and 397 Hannan St., Kalgoorlie.</p> <p><b>ATKINS (W.A.) LTD.,</b> 894 Hay Street, Perth.</p>	<p><b>QUEENSLAND:</b> CHANDLERS PTY. LTD., Cr. Albert and Charlotte Streets, Brisbane.</p> <p><b>SOUTH AUST.:</b> GERARD &amp; GOODMAN LTD., 192-196 Rundle Street, Adelaide.</p> <p><b>TAS.:</b> W. &amp; G. GENDERS PTY. LTD., 53 Cameron St., Launceston; Liverpool St., Hobart.</p> <p><b>LAWRENCE &amp; HANSON (ELECTRICAL) PTY. LTD.,</b> 120 Collins Street, Hobart.</p> <p><b>NOYES BROS. LTD.,</b> 36 Argyle Street, Hobart.</p>
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# Twentieth Annual Federal Convention of the W.I.A.

## Federal Executive's Annual Report

### PRESIDENT'S REPORT

In presenting this report it gives me much pleasure to record the progress made in all grades of membership, which now stands at 2262 as compared with 2156 at this time last year. Although this increase is not very large, it indicates that the Institute has not merely held its ground, but has advanced in the consolidation of membership in all States. It is a big field for Divisional Councils' attention, namely the development of Associate Members to active transmitting membership in the coming year.

Our relations with the Postmaster General's Department have been maintained on the customary friendly basis, and although so very contentious problems have arisen during the year, many minor points have been satisfactorily adjusted.

Considerable efforts have been made this year to indicate to the P.M.G. the Institute's interest in the elimination of overseas commercial stations straying into the Amateur bands and a considerable number of reports from listeners throughout the Commonwealth have been filed with the Department to illustrate the seriousness of the situation. This year, many opportunities have occurred for Amateurs to participate in National Emergencies, and some excellent work has been carried out by those who were equipped for this purpose. It is a pity that very few efforts should be made by Divisional Councils to encourage members in the construction of suitable equipment for this work.

The Contest, which has been carried out this year most effectively, and we feel that all members have enjoyed the contests which have been arranged. It was most unfortunate that there was a late transmission of the Rules for the 1949 V.K.ZL Contest. It is hoped that arrangements can be made with the appropriate authorities in New Zealand so that no such complaint need be made.

This year has seen the finalisation of the Rules for the W.A.S. (Australia) Award (which is the Award offered for the best station in the Commonwealth and the Northern Territory on 50 Mc. or higher bands). There has been increased activity on the bands from 50 Mc. upwards, and some recent excellent work has been carried out with a simple equipment on which much original constructional work has been done.

Several lectures have been given by the S.S.C. technicians, quite a number of members have been carrying out experiments on narrow band f.m.

Following the action by the Federal Council in laying down the Rules for the holding of meetings of member clubs throughout the W.I.A., a number of such clubs have been formed. This move has had the effect of strengthening the Institute in areas where attendance at Institute meetings is difficult.

The usual work falling on Federal Executive officers has been carried out very effectively. The Federal Secretary having handled 776 letters this year as against 686 letters for the same period some years ago. Twenty-five Federal Executive meetings have been held throughout the period, and all members have shown great interest in the work. The Federal QSL Manager handled cards to the value of 56,822 as compared with 53,786 in 1948-49. Costs now work out at 3.3d. per 100 cards as compared with 2.37d last year and 2.54d. in 1947-48. The Federal QSL Manager, Mr. R. E. Jones, has been ably assisted by Mr. Les Jackson.

A total of 28 applications for W.A.C. and W.B.E. Certificates was handled during the year.

It is pleasing to note that the Magazine "Amateur Radio" has been published so successfully, and the Committee members are to be commended on their efforts in handling its finances so well.

I take pleasure in extending my thanks to the Federal Secretary, the Federal Treasurer, and the Federal Publicity Manager, together with all other Federal Officers who have so capably assisted me in the work the Executive throughout the year.

We are sorry to announce the resignation of the Federal Secretary, Mr. W. Mitchell, who is going abroad. Mr. Max Hall will be a very cordial welcome to him.

### FEDERAL TRAFFIC BUREAU

Twice weekly schedules have been maintained during the past few months in a very satisfactory manner with the Divisional Traffic Managers: VK3ARE, VK4AG, VK5JY, VK6SA and VK7OM. A total of 393 (400) cards was made during the period, but the traffic handled both ways and outwards, was very much less than the previous year. Inwards messages totalled 18 (53) and outwards 27 (66) to a total of 66 addresses (117).

The figures in brackets are the comparative totals for the year 1948-49.

### TREASURER'S REPORT, 1949-50

It is with pleasure that I herewith report the annual statement of receipts and expenditure covering the accounts of the W.I.A. Federal Executive.

I desire to stress the necessity of promptly remitting Divisional per-capita payments for the purpose of financing the work of the Executive. This is our only source of income that can be so applied and it is obvious therefore that we must receive your remittances promptly to facilitate our work. It should be pointed out also that the Divisional contributions to the Convention expenses are based upon the membership returns associated with per-capita without which it is impossible for us to compute what contributions each Division should make. At a later stage we will submit for your consideration some alternative suggestions for financing the operations of the Convention. The budgetary figures submitted to you at the 1949 Convention were approximately correct for this year's operations. I now submit herewith the expense account for 1949-50 and budget estimates for the 1950-51 period.

The Treasurer's budget for 1950 was also read:—

QSL Bureau .....	£110 0 0
Printing and Stationery .....	10 0 0
Audit .....	5 0 0
Trophies and Prizes .....	25 0 0
Membership Minimum .....	16 0 0
Petty Cash .....	15 0 0
Convention Dinner .....	20 0 0
Convention Expenses .....	150 0 0
Extenserialing .....	10 0 0
Contingencies .....	20 0 0
	£281 0 0

As a result of the Treasurer's report, the following motions were resolved:—

"That Federal Executive keep a separate account for Convention expenses as distinct from general expenses."—Carried.

"That, in assessing the Convention expenses quota per Division, Federal Executive use the previous year's numbers of full members supplied by each Division in their per capita return."—Carried.

"That the amount of money paid by Divisions as Convention expenses in excess of that actually used shall remain in a Number 2 Account to their credit against the next Convention."—Carried.

"That the rendering of Convention accounts to Divisions be made before the 30th November in each year and that the latest date for payment be within 14 days of the meeting."—Carried.

"That the Statement of Receipts and Payments, as presented by the Federal Treasurer, be adopted."—Carried.

The New South Wales Delegate desired placed on record that there is no balance sheet and in his Division's opinion a balance sheet is an essential part of the Treasurer's equipment.

An assurance was given by the Treasurer to the N.S.W. delegate that a balance sheet of Federal Finance would be forwarded to Divisions as soon as possible.

"That the budget as presented be adopted for the year 1950."—Carried.

A resume of the minutes of the 19th Annual Convention took place and it was resolved:—

"That an expression of appreciation be recorded to those responsible for the design and manufacture of the Remembrance Trophy."—Carried.

"That the Minutes of the 19th Convention as presented be adopted."—Carried.

The President then asked the Treasurer if all Divisions were financial and advice was given that no contributions had been received from VK3 and VK4 Divisions.

A discussion regarding powers of voting then took place and the following motion was carried unanimously:—"That this Council extends the time for payment of the 1950 per capita payment to 21st April, 1950, in accordance with Section 41a of the Federal Constitution."

### FEDERAL QSL BUREAU

The Federal QSL Bureau again functioned smoothly during the period under review. Cards handled totalled 56,822 as compared with 53,786 in 1948-49, and 55,469 in 1947-48. The lower total is attributable to the continued publicity given to the addresses of the Divisional Bureaux, and to the greater circulation of International call books, thus encouraging stations to either send cards direct to the addressee or to the Divisional Bureau.

Despite the reduced volume of traffic handled by the Federal Bureau, the costs of handling continued to rise. This is a result of an average overall increase of 30 per cent. in the postal charges for printed matter, which took effect from July, 1949. The increased rates covered two-thirds of the year's activities. When the Federal Government, now in office, were in Opposition, they made numerous requests to the Government for a reduction in postage rates, in which they were strongly supported by influential bodies such as the Chambers of Commerce etc. Since the last Federal elections with the consequential change in Government, no mention has been made of this matter, nor has the Associated Chambers of Commerce been heard on the subject. It is hoped that the matter may be envisaged in the next Federal budget when presented later in the year. Costs now work out at 3.3 pence per 100 cards as compared with 2.37 pence last year.

### WIRELESS INSTITUTE OF AUSTRALIA—FEDERAL EXECUTIVE

STATEMENT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDED 31st MARCH, 1950

RECEIPTS		EXPENDITURE	
Balance in Bank, 1/4/49 .. ..	£87 3 10	Convention Expenses .. ..	£119 13 6
Per Capita payments:—		P.M.G. (Cable Address) Telegraphic ..	2 2 0
VK7 .. .. .	£5 8 0	Licence VK3 .. .. .	1 0 0
VK3 .. .. .	4 2 0	P.O. Box Fee .. .. .	4 0 0
VK2 .. .. .	37 11 0	Insurance (Trophies) .. .. .	1 0 0
VK4 .. .. .	10 15 0	Photographing Trophies .. .. .	2 6 6
VK6 .. .. .	7 0 0	Trophies and Prizes .. .. .	11 2 6
VK5 .. .. .	2 15 8	Badges and Shields .. .. .	76 9 8
VK7 .. .. .	5 10 0	Printing .. .. .	3 8 9
VK6 .. .. .	6 17 0	Typing and Dictating (Minutes of Constitution, etc.) .. .. .	24 4 5
Convention Expenses quota:—	103 0 8	Audit Fees .. .. .	3 3 0
VK7 .. .. .	£6 10 0	Secretary's Petty Cash .. .. .	15 0 0
VK3 .. .. .	4 11 0	Bank Charges .. .. .	10 0 0
VK2 .. .. .	12 6 8	Advances re 1950 Convention Expenses .. .. .	
VK4 .. .. .	12 13 4	VK3 .. .. .	£19 10 0
VK5 .. .. .	2 15 8	VK6 .. .. .	54 0 0
VK7 .. .. .	2 19 8	VK7 .. .. .	19 6 0
VK6 .. .. .	22 9 9		92 16 0
VK4 .. .. .	8 6 8	Balance in Bank .. .. .	7 17 1
	150 8 11		
Certificates .. .. .	23 10 6		
Exchange added to cheques .. ..	2 6		
	£364 0 11		£364 0 11

I hereby certify that I have examined the Cash Book and Vouchers of the Federal Executive of the Wireless Institute of Australia, reconciled the Cash Book with the Bank Pass Book as at 31st March, 1950, and prepared the above Statement of Receipts and Expenditure which, in my opinion, correctly shows the Receipts and Payments for the year, according to the best of the information given to me.

(Sgd.) THOS. F. HISCOCK, F.C.A., Chartered Accountant (Aust.).

Wireless Institute of Australia, Federal Executive—(Sgd.) F. Evans, Hon. Treasurer.



year and 2.24 pence in 1947-48. Despatches to the Victorian Bureau were again delivered by hand, thus reducing the working cost of the Federal Bureau and the thanks of all are due to Mr. Les Jackson, VK8JM, for his work in this connection. Division QSL Bureau personnel remained unchanged throughout the year with the exception of the Queensland Division, where during the year the duties of QSL Manager were taken over by Mr. Eric Lake, VK4JF, from Federal aspect, all the Divisional Bureaus functioned efficiently. Items of interest from a QSL aspect, as well as other items of general interest were published monthly in the Federal QSL Bureau notes in "Amateur Radio."

#### Statement of Receipts and Expenditure:—

Receipts	
By Credit Balance from 1948-49 . . .	£ 6 1
Advance from Federal Executive . . .	0 0 0
	£ 6 1

Expenditure	
To Postages on despatches to Divisional Bureaus, W.A.C. applications, general stationery and purchased	£ 7 16 4
" Cash and stamps on hand . . . . .	7 9
	£ 8 4 1

The New South Wales Delegate: "How does the proportion of members to total licensed Amateurs compare?"

The Chairman: "There are 2,800 licensed and the W.I.A. membership is 2,262, which includes associate members as well as transmitting members."

There are 1,600 licensed Amateurs as full members. We represent 60 to 75 per cent. of the active transmitting members, the rest are not active."

N.S.W. Delegate: "Where have you found that member club activity has been greatest?"

Chairman: "Zona has been progressing very favourably. There have been three clubs in Victoria and New South Wales has been most successful."

N.S.W. Delegate: "The inclusion of member clubs in the future of the W.I.A. should be considered, concerning W.I.A. and club affiliation. We have had no further trouble similar to that which we had with clubs quite a few years ago."

Chairman: "There was a group in Darwin who wanted to form a club. They are now part of the South Australian Division. They will form a useful one until they grow up. They have not got 25 fully licensed members yet."

The Chairman then read a letter which had been received from the South Australian Division praising the work of the Federal Secretary.

W.A. Delegate: "Can you give us an indication of the number of observers of commercial interference there are operating?"

Chairman: "Your State is the most active. Most of the other States have not done as much in this matter. N.S.W. there are none in Tasmania, 2 in Victoria, 2 in Queensland, 2 in South Australia, 1 in Western Australia, 1, a total of 8. In South Australia one man collects a whole lot of individual reports. Western Australia provides us with a considerable amount of data."

N.S.W. Delegate: "I understand that we have some 15 fully licensed observers not to the same extent as in Western Australia."

It was then moved that the Federal President's report as read be adopted.—Carried unanimously.

## Minutes of the Convention

The following sets out the findings of the 20th Annual Convention. All decisions under the heading of General Business must be ratified by a majority of the Divisional Councils before the necessary action can be taken.

### AGENDA ITEMS

1. "That the amended rules of the DX C.C. as attached at Appendix A, with the deletion of the words 'or the A.R.R.L. List' in Rule 3, be adopted." The motion was Carried.

The Western Australian Delegate stated that in view of the fact that Appendix A has been accepted we are not anxious to withdraw it.

2. "That a special certificate be provided by Federal Council to be awarded by Divisional Councils or Federal Council to members in cases where no suitable award exists."—Lost.

3. "That Federal Executive be directed to contact the I.A.R.U. with a view to setting up an international organisation for controlling DX C.C. matters."—Carried.

4. "That Federal Council recognise that Tasmania be regarded as a separate country for the purposes of the Australian DX C.C. Award."—Lost.

5. "That a standard set of rules, as submitted by the New South Wales delegate, be adopted for the VK-ZL Contests."—Carried.

6. "That draft proposals for any change in the standard contest rules for the VK-ZL Contests be circulated to all Divisions at least five months before the Contest."—Carried.

7. "That draft proposals for any changes in rules of Australian Contests be circulated to all Divisions at least three months before the Contest."—Carried.

8. "That in future National Field Day Contests the 100 Mc band shall be 25 for each new State or Country."—Carried.

9. "That Federal Executive be instructed to approach the I.A.R.U. with a view to securing the cooperation of radio societies and organisations conducting international contests in limiting these to one week-end per year for phone and one for c.w."—Carried.

10. "That the Trans-Tasman Contest be eliminated."—Carried.

11. "That the period of operation of any local award certificate be limited to 12 consecutive hours within the 24 hours set down."—Carried.

12. The Queensland delegate withdrew this item in lieu of item 10.

13. The voting procedure for the award of the State trophy for the Remembrance Day Contest, as used in the 1948 Contest, be reverted to."—Lost.

14. "That the existing rules for the 1949 Remembrance Day Contest be adopted for the 1950 Remembrance Day Contest and that the method of determining winners be altered for the trophy and individual scores."—Carried.

Amendment: "That in respect of the points to decide who shall hold the trophy, that the following alterations be made: That the logs of the six highest scores be averaged and to this average be added

a bonus equal to twice the percentage entries in the State." The amendment lapsed for want of a second mover.

The original motion was carried.

15. "That in future National Field Day Contests full publicity be given by all Divisions in every way possible for the purpose of drawing attention to the contest and further that Divisions organise teams to ensure active participation by all States."—Carried.

16. "That an endeavour be made to evolve a standard numbering system for world wide contest use and that the numbering system already devised upon for the VK-ZL Contests be recommended as a suitable system."—Carried.

17. "That all relevant aspects of the publication of 'Amateur Radio', from a Federal viewpoint, be discussed by the Western Division."—Carried.

After discussion it was moved by Mr. G. Moss (W.A.) and seconded by Mr. H. Austin (S.A.) as follows: "We are gratified with the improvement in this year in the magazine and that the present satisfactory position continues."—Carried.

18. "That the responsibilities of Federal Council concerning Amateur Radio be determined."—Carried.

After discussion the following determination was arrived at—moved by Mr. J. Morley (N.S.W.) and seconded by Mr. G. Moss (W.A.): "That the responsibilities of Federal Council concerning 'Amateur Radio' shall include:—

(a) The preparation of Editorials;  
(b) opinions concerning Federal W.I.A. matters and/or contacts with other bodies, and;  
(c) Any matters which might prejudice relationships between the Divisions or between Amateurs generally."

19. "That the quarterly statement as now supplied on the income and expenditure of 'Amateur Radio' be continued."—Carried.

20. "That 'Amateur Radio' publish from time to time suitable articles taken from overseas technical magazines."—Carried.

21. Federal Executive withdrew this item.

22. "That the contents of the Institute's Policy Book be reviewed at each Convention to preserve continuity of Federal policy."—Carried.

23. "That the following clauses be incorporated in the Federal Constitution dealing with Membership Transfers to provide that:—

(1) The recipient shall receive him as a financial member for the remainder of the financial year provided he was fully financial before departing from the losing Division.

(2) The Secretary of the losing Division shall advise the Secretary of the recipient Division of the intending transfer and of the member's financial status and grade."

—Carried.

24. "That a specimen application form for membership be incorporated as in the Federal Constitution (an amendment) in 1947."—Carried.

25. "That the uniform Divisional Constitution as discussed be considered by the Divisions and returned with their comments for incorporation in the next year's Federal Executive at the earliest possible moment."—Carried.

26. "That upon the acceptance of the uniform Divisional Constitution by each Division that Division be not to alter any clause in that uniform Divisional Constitution without the approval of Federal Council."—Carried.

27. "That Federal Executive be instructed to initiate amendments to the Federal Constitution to provide that in matters of finance involving all Divisions, a majority vote of at least 5 to 2 of the Federal Council be required for the passing of the motion."—Carried.

28. "That the minutes of the Federal Executive meetings as now supplied to all Federal Councilors be forwarded to the Divisions."—Carried.

29. "That Federal Executive formulate arrangements for the reception and entertainment of American Amateurs in 'Back to Australia' year 1950."—Carried.

30. "That the 1951 Convention be held in Sydney."—Lost.

31. "That Federal Executive approach the P.M.G. for permission to play back received 50 Mc. and higher Amateur transmissions on those bands."—Carried.

32. "That representations be made to the P.M.G.'s Department for permission to record by modern techniques transmissions of Amateur Stations and play back the air on frequencies to be laid down by the Department."—Carried.

33. The New South Wales delegate withdrew this item as the matter had already been fully published.

34. "That the P.M.G. be approached for permission to transmit music on type A3 stabilised emission for experimental purposes on sections of the 10 Mc. band and high power."—Carried.

35. "That the P.M.G.'s Department be approached with a request that all licensees in the Northern Territory be asked to prefix VKA."—Carried.

36. "That Federal Executive be asked to endeavour to speed up the allocation of the 21 Mc. band in view of the large amount of commercial interference on the 1 and 14 Mc. bands."—Carried.

37. "That Federal Executive approach the P.M.G. for permission to broadcast from the Institute stations, talks of a technical nature such as those given at monthly meetings."—Carried.

38. "That Federal Executive be directed to discuss with the Broadcasting Control Board the matter of TV with a view to suggesting certain transmitting and receiving frequencies to manufacturers in Australia."—Carried.

39. "That the P.M.G.'s Department be approached to permit a portable amateur transmitting operation on the 27-28 Mc. band."—Carried.

40. "That representations be made to the P.M.G.'s Department for permission to operate transmitters under suitable conditions for use as portable beacons, in any frequency band."—Carried.

41. "That the age limit for the issuance of the A.O.P. and the granting of an Amateur Station Licence be reduced to 16 years."—Carried.

42. The Victorian delegate withdrew this item.

43. "That the 'gentlemen's agreement' band for c.w. be extended to 7650 Kc. in view of the emergency network phones on 7600 Kc."—Carried.

44. "That approval be sought from the P.M.G. for the use of an Identifying signal by Amateurs conducting emergency communications. The signal to have the significance: 'I am conducting emergency traffic, please do not cause interference, and that Federal Executive be instructed to give the signal wide publicity."—Carried.

45. As a result of the discussion which took place on the interference received from medium frequency broadcast transmissions, it was decided that the preference in 'Amateur Radio' the need for more reports from observers on this type of interference.

46. "That the need for more reports from observers on this type of interference be used only where necessary and that the Interference List be recommended as being known throughout the world. Federal Executive should publicise this decision."—Carried.

### ITEMS OF GENERAL BUSINESS

(All Divisions to ratify all items under this heading)

1. "That Federal Executive be instructed to take the necessary steps to amend Section 41a of the Federal Constitution to read 'and the word '30' and inserting the word '14'."—Carried.

2. "That an expression of opinion regarding the advisability of the name of the W.I.A. being changed in view of the fact that the present title is 40 years old and could possibly be brought into line with current development."—Carried.

3. "That the question be discussed, but it was felt that no change should occur to the existing name which is well established, for sentimental reasons, and in addition the cost of such an action would be considerable."—Carried.

4. "That the Federal Executive supply each Federal Council with a copy of the summarised policy of the Federal Council and with amendments as they are received."—Carried.

5. "That the 50 mile radius limit on portable licensees be abolished."—Carried.

6. "That the motion be withdrawn in view of the explanation supplied."—Carried.

(Continued on Page 16)



# FEDERAL, QSL, and DIVISIONAL NOTES

Federal President: W. R. GRONOW (VK3JWG); Federal Secretary: G. M. HULL (VK3JZS), Box 2611W, G.P.O., Melbourne.

## NEW SOUTH WALES

Secretary—Maurie Butler (VK3AAN), Box 1734 G.P.O., Sydney.  
**Meeting Night**—Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Sydney.

**Divisional Sub-Editor**—A. C. Pearce, 131A Balmain Road, Leichhardt, N.S.W.

**Zone Correspondents**—**Coast & Tablelands:** M. Metcalfe, VK2XO, Raleigh; Newcastle: H. Whyte, VK2AHA, Vale St., Birmingham Gardens, Newcastle; Coalfields and Lakes: H. Hawkins, VK2HLL, 27 Comfort Ave., Cranbrook; Western: W. H. Stitt, VK2WH, Cumbajowa, Forbes; South Coast and South-east: E. H. Rayner, VK2DO, 42 Pettit St., Yass; Western Suburbs: A. C. Pearce, VK2AIB, 48 Harrabrook Ave., Five Docks; Eastern Suburbs: H. Rerr, VK3AX, No. 4 Flat, 114 Hewlett St., Bronte; North Sydney: D. Cuffe, VK3AL, 777 Military Rd., Moeman; St. George: J. A. Ackerman, VK3ALD, 32 Park Rd., Carlton; South Sydney: V. E. Wilson, VK2YV, Cr. Wilson St. and Marine Pde., Maroubra.

## VICTORIA

Secretary—C. Dyer (VK3DY), 19 Collington Ave., Brighton (XA 632E).

**Administrative Secretary**—Mrs. S. May, Law Court Chambers, 121 Queens St., Melbourne, C.I.

**Meeting Night**—First Wednesday of each month at the Radio School, Melbourne Technical College.

**Zone Correspondents**—**Western:** C. C. Waring, VK2YV, 12 Slocum St., Stawell; **South Western:** K. O'Rourke, VK3AKH, Killigrew, Westmore; **North Eastern:** H. G. Woblers, 107 Templeton St., Wangaratta; **South Western:** M. Fuller, 101 Lennon Ave., Mildura; **Eastern:** H. J. Kelias, VK3AHR, Timbarra; **North Western:** C. Case, VK3ACE, Cumming Ave., Birchlip.

## FEDERAL

### DX C.C. LISTING

#### PHONE

VK3JD (1) .....	36	143
VK6KW (4) .....	37	134
VK6RU (2) .....	37	132
VK3BZ (2) .....	36	129
VK3EE (10) .....	35	125
VK4JE (5) .....	35	114
VK3ED (9) .....	35	129
VK4ES (9) .....	35	113
VK4LN (11) .....	35	112
VK4HR (12) .....	33	107
VK2ADT (13) .....	32	102
VK3IG (5) .....	30	100
VK3JE (7) .....	30	100

#### C.W.

VK3BE (6) .....	40	165
VK3BE (2) .....	40	152
VK3CO (3) .....	40	151
VK4EL (9) .....	40	140
VK3KB (10) .....	39	138
VK3YV (4) .....	40	136
VK2QL (5) .....	40	133
VK4HR (5) .....	40	126
VK3YV (4) .....	40	124
VK3EK (3) .....	38	126
VK3YV (4) .....	38	122
VK4RF (11) .....	35	119
VK6RU (16) .....	35	116
VK3YV (12) .....	35	112
VK4DA (7) .....	37	113

#### OPEN

VK3BZ (4) .....	40	189
VK3AX (1) .....	40	167
VK6RU (8) .....	39	166
VK3YV (7) .....	40	161
VK2DI (2) .....	40	160
VK3HG (3) .....	40	160
VK3YV (12) .....	39	154
VK6KW (13) .....	39	153
VK4EL (10) .....	40	149
VK3YV (16) .....	39	139
VK3YV (19) .....	39	138
VK4ES (24) .....	36	133

## A BRAILLE MAGAZINE

Errett A. Erickson, WINLM, of 5 Oaklands Heights, Bethel, Conn., U.S.A., in association with other U.S. Amateurs, is compiling a new Braille magazine for the blind Amateur and a.c.w. If you know of anyone who might be interested in such a praiseworthy scheme, it would be appreciated if you will communicate with WINLM.

## WI BANDS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

**VK2WI**—Sundays, 1100 hours EST, 7196 Kc. and 5900 hours EST, 504 Mc. No frequency checks available from VK3WI. Intra-State working frequency, 7175 Kc.

**VK3WI**—Sundays, 1130 hours EST, simultaneously on 3580 and 7196 Kc. and re-broadcast on 50 and 144 Mc. bands. Intra-State working frequency, 7185 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

**VK4WI**—Sundays, 0900 hours E.S.T. simultaneously on 3740 Kc., 7196 Kc., 14435 Kc., 52.4 Mc. and 144.135 Mc. Frequency checks are given two nights weekly, and the times are announced during Sunday broadcasts. 7.05 Kc. channel is used from 1000 to 1030 hours each Sunday as VK4 query service to VK4WI.

**VK5WI**—Sundays, 1000 hours SAST, on 7196 Kc. Frequency checks are given by VK5WD on Friday evenings on the 7 and 14 Mc. bands.

**VK6WI**—Sundays, 0930 hours WAST, on 7196 Kc. No frequency checks available.

**VK7WI**—Second and Fourth Sundays at 1000 hours E.S.T. on 7196 Kc. No frequency checks are available.

## TRANS-TASMAN CONTEST

In view of Agenda Item No. 11, of the 20th Annual Convention, the Trans-Tasman Contest will not be held.

## RADIO INSPECTORS ENTERTAINED

The Federal Executive, on behalf of Federal Council, entertained Messrs. Dobbyn and Pearson, of the Wireless Branch of the P.M.G. Department, at a farewell dinner to Bill Mitchell (VK3UM), the past Federal Secretary, who was presented with a Parker 51 Pen in appreciation of his sterling services. It is hoped that Bill's official duties will permit him to put this pen to paper and thereby give us some news of the Amateur doings in England during the next two years.

Mr. J. Dobbyn, an Amateur, VK3DO, has spent the past 34 years as the Commonwealth representative on the International Telecommunications Union at Geneva where the allocation of frequencies to all types of services is being considered on engineering principles. As the Atlantic City Convention granted the Amateurs of the world status as a service, your interests were considered, but the bringing into operation of these facilities is still in the distant future. When the time does eventually arrive for us to have the 21 Mc. band, there will be, as a counter measure, a decrease in the frequencies on 7 and 14 Mc. as determined at Atlantic City.

## CHANGES TO AMATEUR CALL SIGNS

### New Issues—

VK2ST—E. C. R. Stony, 64 Shadforth St., Moeman.  
 2AOB—A. Hazey, 3 Linka Rd., Moeman.  
 2AQZ—R. H. Black, 36 College St., Sydney.  
 2AUM—J. G. Moss, 15 Baldry St., Chateauford.  
 VK3AS—S. Lawrence, 19 Bennett St., North Richmond.  
 3AFQ—E. L. D. Trehan, 11 Glenvale Rd., Glen Iris.  
 3AHP—W. H. Fleming, Springhurst.  
 3ARW—L. C. Weightman, 12 Taylor St., Oakleigh.  
 VK4EN—R. P. Hambridge, 87 Pine St., Wynnman.  
 4RR—R. W. Rose, Cassowary St., Longreach.

## W.I.A. ACTIVITIES CALENDAR

June 7: Ratification of Convention items due with F.E.

## QUEENSLAND

Secretary—W. L. Stevens, VK4TB, Box 6383, G.P.O., Brisbane.

**Meeting Night**—Last Friday in each month at the Y.M.C.A. Rooms, Edward Street, Brisbane.

**Divisional Sub-Editor**—F. H. Shannon, VK4SN, Minden, via Rosewood.

## SOUTH AUSTRALIA

Secretary—E. A. Barbier, VK5MD, Box 1234E, G.P.O., Adelaide.

**Meeting Night**—Second Tuesday of each month at 17 Wymouth St., Adelaide.

**Divisional Sub-Editor**—W. W. Parsons, VK5PS, 493 Esplanade, Henley Beach.

## WESTERN AUSTRALIA

Secretary—W. E. Coxon, VK6AG, 7 Howard St., Perth.

**Meeting Place**—Padbury House, Cor. St. George's Ter. and King St., Perth.

**Meeting Night**—Watch the Monthly Bulletin.

**Divisional Sub-Editor**—George W. Ashley, VK6GA, 33 Mars Street, Carlisle, Western Australia.

## TASMANIA

Secretary—R. D. O'May, VK7OM, Box 371B, G.P.O., Hobart.

**Meeting Night**—First Wednesday of each month at the Photographic Society's Rooms, 163 Liverpool St., Hobart.

**Divisional Sub-Editor**—G. D. P. Clarke (VK7TA), c/o. THO, 82 Elizabeth Street, Hobart, Tas.

**Northern Zone Correspondent**—R. H. Kilby, VK7RE, 5 Galvin Street, Launceston.

VK5WY—G. C. R. Waters, c/o. Kahlin Hospital, Darwin, N.T.

VK6BY—R. R. Aubrey, 120 Canning Highway, South Perth.

6HB—C. L. Bullock, "Alderside," Beckley, 60Y-V. H. Mitchell, 121 Hill St., Perth.

VK7BK—S. G. Kitchen, 11 Pine Ave., Seven Mile Beach, Hobart.

7BW—J. E. Ward, 40 Pirie St., New Town.

VK9FM—R. H. Mould, Civil Aviation Department, Port Moresby.

### Alterations—

VK2GR—22 Linders Road, Lane Cove.

2KN—"Taluss," Littleton St., Herne Bay.

2QX—148 Wileys Ave., Lakemba.

2TS—c/o. S.S. "River Burdakin," c/o. Amalgamated Wireless Ltd., 47 York St.

2TZ—455 Rocky Point Rd., Sans Souci.

2YZ—9 Leo St., Gladstone.

2ABC—60 Alma Rd., Maroubra.

2ARQ—21 Sandridge St., Bondi.

VK3AD—22 Roman St., North Essendon.

4DZ—1 Stanley St., North Williamstown.

3JL—60 St. Andrews St., Brighton.

3JX—Rear 438 Neerim Rd., Murrumbidgee.

3ZJ—4 Birdwood St., Frankland.

3QP—123 Sohoan St., Shepparton.

4PZ—4 Lemnos St., Croydon.

3PZ—"Carters," Varrigall Rd., Holmestown.

3US—Day Avenue, Omeo.

3VL—Day Avenue, Omeo.

3ACB—25 Lennox St., East Richmond.

3AD—169 Dill St., Bondi.

3ARL—Cr. Darlington Rd. and Walker St., Sawell.

3AV—155 Cartwright St., Glenroy.

VK3CE—255 McBryde Terrace, Whylla.

VK3RT—School House, Cuse.

6RZ—c/o. O.T.C. Wireless Station, Applecross.

### Deletions—

VK3BO—Cancelled.

2AFL—Cancelled.

VK3GH—Cancelled.

VK3YV—Cancelled.

3ACQ—Cancelled, now operating under VK3ARW.

3AWV—Cancelled, now operating under VK3WV.

VK4ES—Cancelled.

4RQ—Cancelled, now operating under VK4RR.

VK3AG—Cancelled.

5AY—Cancelled, now operating under VK6BY.

3CI—Cancelled.

2RS—Cancelled.

VK6AB—Cancelled.

3FPL—Cancelled, now operating under VK9FM.

VK9BF—Cancelled.

9FZ—Cancelled.

9NK—Cancelled.



## PUNCTUALITY

During the last few months some correspondents to this magazine have been forwarding their notes in late. In an endeavour to continue to deliver to you the magazine on the first of each month, it is requested that all notes be posted to arrive before the 8th of the preceding month.

Your co-operation in this respect would be appreciated. No responsibility will be taken by the Magazine Committee for the non-appearance of notes received after the closing date. This will be strictly adhered to as from this issue.

## FEDERAL QSL BUREAU

RAY JONES (VK3RJ), MANAGER

Official advice has now been received of the re-licensing of Amateur Stations in Poland with the old International prefix of SP. The re-licensing of their official organisation. The organisation has retained its old title which is PZK (for short) and its address is still that of the QSL Bureau is PZK, Postbox 320, Warsaw, Poland.

An International Congress of Radio Amateur Associations affiliated with the I.A.R.U. was scheduled to be held in Paris, France, on 25th to 27th March. The Congress was organised to celebrate the twenty-fifth anniversary of the founding of the I.A.R.U. and the R.E.F., according to advice from the latter body.

According to the official A.R.R.L. broadcast, heard at excellent strength on 14.100 Kc. on April 16, the DX Expedition to the Galapagos Islands, conducted by the Guayaquil Radio Club, has been delayed. The scheduled sailing date was advanced to April 12. Four days' sailing time will be required, during that period the expedition was scheduled to operate maritime mobile on 28 Mc. On arrival at Galapagos Islands, the expedition will operate on 80, 40, 20, and 10 metre bands, both phone and c.w., under the call sign HC8GRC. No information was given as to the duration of the stay of the expedition.

Writing under date of April 12, Felix, FK8AC, states that a pirate has been active on the c.w. call sign FK8BKK. Felix requests the co-operation of all stations "in covering this black cat" and stresses the fact that the c.w. call signs so far issued are FK8AA through FK8AG, but indicates that FK8AI and FK8AH are expected to be on the air in the near future.

Andre Baillet left Noumea for Matanui (Wallis Island) about April 16. As forecast in these notes, Andre will operate under the call sign FW8AA and first will use 2000 Kc. with a 100 ft. rig using a vibrator power pack putting about 10 watts into a half wave Windom antenna. No further details as to hours of operation are yet available, but as Andre is scheduled to remain at Matanui for six years, there will be time for all to make the contact. Andre has been well coached in the methods of obtaining pile-ups on his frequency.

The full QTH of ZX1BC, who is currently putting in a hefty c.w. signal to VK on the 14 Mc. band, is: R. Hanley, care Civil Aviation Branch, Rarotonga, Cook Islands.

The full QTH of VK9JC, who is presently active on 14 Mc. c.w., is: 2054 L.A.C. W. Cromie, R.A.A.F. Station, Momoete, Admiralty Islands. VK9JC, who is ex-VK8AWC and ex-VK4WL, says conditions are usually good there in the evenings and early mornings and from 0900 G.M.T. the VK3 stations pour in. He advises the use of airmail for QSL's as surface mails take up to three months to arrive.

Melbourne is again to be favored with a visit from VK6SA, Jim Austin still very active and with ability undiminished by the passing years. Jim is attending the two yearly conferences of the Police Department of all States. It was only yesterday that Jim attended a similar gathering here, which is indicative of the speedy passage of time.

My old friend, Treb, of B.E.R.S. 195, ever willing to assist in any way possible, succeeded last year in making contact by correspondence with VK6WL and thus straightening out an awkward situation with QSL's for the last station. The following topical pairs are from B.E.R.S. 195 and are appreciated.

Ken Cook, G2RKC, is anxious to have 7 Mc. contacts with VK stations. Ken is ex pre-war ZC9AQ and SUTAG and sends his greeting to all old VK friends, especially VK3DQ.

A QSL to hand from ZS8B, Gerhard Scholtz, of Port Tumbes, British South West Africa, states he is 19 years of age and a bricklayer by occupation. His c.w. signals can be heard on 14 Mc. around 2030 G.M.T.

Friends of Z89D, Ivan Quarmby, will be pleased to know that he has recovered from injuries received in a motor accident several months ago.

Max Ripper, VK3AMR, late of Balmalra, Vic., is now at Madang, New Guinea, and as VK3AMR/VK9 has been active around 1000 G.M.T.

Jim Widdup, VK9WL, writing from Torokini, New Ireland, under date of April 18, indicates that he has not much time for the pursuit of Amateur Radio. Judging by the QSLs that come to hand, Jim makes very good use of the little time he devotes to the game. Jim, who has a lifetime of experience in the islands, the tropics and coastal radio, gives his age away by mentioning his acquaintance with several postal telegraphists at Darwin. I know it is well over 20 years since those men were at Darwin. Alas Jim, Peter Fox passed on at Launceston several years ago, but understand Joe Brophy can still answer the roll call.

This Bureau requires the current address of OK1WE, now in Australia.

Following are the addresses of Divisional QSL Bureaux (for application for incoming cards):  
— N.S.W.—Jim Corbin, VK2YC, 78 Maloney St., Eastlakes, Sydney.

Vic.—Graham Roper, VK4ZB, 26 Lucas St., Caulfield, S.E.B.

Qld.—Eric Lake, VK3EL, Old Cleveland Rd., Camp Hill, Brisbane.

S.A.—Geo Luxon, VK5RX, 8 Brook St., West Melbourne, South Aust.

W.A.—J. E. Rumble, Box 4319, Perth.

Tas.—T. Allan, Thirra St., New Town, Hobart.  
Federal (W.A.C. and W.B.E. applications):  
— Ray Jones, VK3RJ, 23 Landale St., Box Hill, E.11, Vic.

— . . . —

## NEW SOUTH WALES

The monthly meeting of the Division was held at Science House, Gloucester Street, Sydney, on Friday, 28th April, at 8 p.m.

The annual general report was received and adopted and 20 new members admitted to the membership. Then the returning officer, together with several retired to count ballot papers for the election of Council members for 1950-51. In their absence general business was resumed and finalised. The President, Mr. H. F. Trehanne (VK2BM) thanked Council and ex-officio members for their good work throughout the year. By all accounts the Urunga Convention was an unequalled success. Council and the Institute were represented by 2AAN and 2AYE. A full report on the Urunga gathering will be found elsewhere in this issue.

20R moved a vote of thanks to the Chairman for his sterling work during the year and 23Q, organ-

iser of the Urunga Convention, then addressed the meeting. Class Manager, Ian Appleby, gave an account of activities in A.O.C.P. Classes. Fred Phillips, who is Chairman of the Disposals Committee, gave an account of disposal operations and the long hours and hard work encountered. Fred and his merry men are to be congratulated for an extremely fine performance and there are lots of satisfied customers.

2YU reports that more QSL cards are going out of the country than are coming in and hopes that this state of affairs will be soon remedied.

On the motion of 2AYE, 2MM was invited to report on the Urunga show and he was followed by 2AAN in his capacity as official representative of the Institute at Urunga. Dave detailed the events there and forecast some of the things in store to delight the next gathering of the clan. A vote of thanks to 5XQ, for his hard work in helping to make Urunga a success, was carried by acclamation.

A long discussion took place on a proposal that members at the monthly meetings should have a small card bearing name and call signs pinned to their coats. It is expected that Council will give very favourable consideration to this novel suggestion, and no doubt members will take advantage of the situation to make personal contact with those fellows they have not chance to meet, except on the Ham bands.

In the ballot for Council members 1950-51, the following were declared elected:—M. Butler, 2AAN; M. Brown, 20R; J. Corbin, 2YC; D. Evans, 2AYE; J. Moyle, 24U; W. Nye, 2XU; Y. Wilson, 2VW.

Vaughan Wilson, official operator of the voice of the Wireless Institute of Australia, N.S.W. Div., VK2WI, reported on transmissions during the past year and enlarged on future operations of the official station.

It was disclosed that Eric Pierre, VK2VE, will be moving through Brisbane, Dararg, etc., and perhaps Baradood. Needless to say, Eric will be visiting many a Ham shack in these remote parts and would appreciate VKs listening for any calls. Eric was given a hearty send-off. No doubt the DX fraternity have it fixed to persuade some of the rare ones to look harder down to this quarter of the globe.

## EASTERN SUBURBS

VK5ARD, of North Bondi, is having fun with an unusual antenna recommended for trial by 2XO. This is the W3E2P all-band affair which, although as the title implies, originated in U.S.A., is described only in the R.S.G.B. Handbook. In other words, it is popular with Gs. It consists merely of an 84 feet length of wire and a small counter-poise. The latter is 8 ft. 6 in. long where the system is to be used on 10 and 20, and 17 ft. long for 40 and 80. The CP must run inside the shack, at right angles to the antenna. It really does work, too, as witness 2AAR's results on 40 and 20.

2CP has been heard for a brief appearance on 40 phone and finds difficulty in working some directions because of location: below a 300 ft. rise. Bob Gurr, 2ARQ, recently 5RQ, is having teasing troubles with a modulator and is anxious to run

## DURALUMIN TUBING FOR WIRELESS AERIALS

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Phone MX 4621 (5 lines).

Telegrams: "Metals," Melbourne.

skeds with his South Australian cobbler when he gets the gear to behave like him. He and ZAYE maintain close liaison and QTH proximity. Another old ham who puts in brief appearances on both 40 and 20 is ZED. Otto was the originator of Sydney action ZUW—who is now on the air broadcasting. His radio business doesn't allow much time for hamming. Also in the category of the "OT lived here" is ZB who is now on the air with DX on 20 phone. One thing Tom, those "skirts" want to come in a bit!

ZABD scored another nautical success in winning that Queensland contest. He is a winner with "Kyeema". He, like all Australians, with a sense of value of mobile gear, takes along a Number Eleven when out among the white horses. ZYF recently broke out with a rotary antenna and it seems to be in doubt about something. With his plain old single wire feed antenna, ZAX can be heard in 40 and 20, but occasionally goes c.w. on 40 and 20 and takes an occasional look over at 80 as well. Only heard spasmodically these days is ZFJ who ran into a non-mechanical or electrical form of "tower trouble" engendered by local Council wallahs. Jack nurse pipe-dreams of the land he has bought up Gosford way, and that way lies the seeds of planting an antenna array. Yes, that his call sign is ZFJ, but he is ZYF and ZNO's the negative in the area—if the reader can't see this, have another try! ZNO has been heard more than any other on 40 and 20. He is a ham and a nostalgic QSO with ZBD, nostalgic? Yes, for Zio was, in years gone by, the famous ZBP, of Hazelbrook in the Blue Mountains. ZNO and ZABD established an article in the Sydney Morning Herald on pre-war 5 metre band in 1933-34. A new antenna is under test at ZNO (don't tell me there is none). Don and ZYF are running an unusual tower arrangement using a combination of 300 ohm ribbon, 75 ohm line, and plain wire. He says if the Editor would like the gen he will knock off an article on ZABD's radio and other things well-come—Editor.) ZNO, who is a veteran of the Two Big Seraps, is back with his first love, Naval Aviation. He is now on 40 and 20 and does much things.

ZYF is heard occasionally on 20 phone and takes an active part in the Waverley Club, along with ZAYF. Over in Randwick, ZABG sticks to his key-punching mostly but changes to speech in despair when c.w. contacts are non-existent. If anybody in the neck of the woods wants any proof of the utility of a vertical radiator, listen to ZABG. He gets out on 20 and 40, and he handles it well. By anything but a good location. That grizzled OT "Two HP Sauer," Harold, is reported to be noisily through with the building of a double L.T. receiver to "beat" the noise out of his hands. He is a ham and a nostalgic QSO with ZBD, nostalgic? Yes, for Zio was, in years gone by, the famous ZBP, of Hazelbrook in the Blue Mountains. ZNO and ZABD established an article in the Sydney Morning Herald on pre-war 5 metre band in 1933-34. A new antenna is under test at ZNO (don't tell me there is none). Don and ZYF are running an unusual tower arrangement using a combination of 300 ohm ribbon, 75 ohm line, and plain wire. He says if the Editor would like the gen he will knock off an article on ZABD's radio and other things well-come—Editor.) ZNO, who is a veteran of the Two Big Seraps, is back with his first love, Naval Aviation. He is now on 40 and 20 and does much things.

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Another E.S. station, ZYF, on 40 has been heard there lately in the form of ZQG.

#### NORTH SHORE ZONE

One Ham, who won't suffer like the rest of us from XYL trouble when he gets married is ZEL, who has been fortunate enough to win the hand of ZIC's daughter. Congratulations, you lucky couple! ZYF is now operating from his new location. He is a ham and a nostalgic QSO with ZBD, nostalgic? Yes, for Zio was, in years gone by, the famous ZBP, of Hazelbrook in the Blue Mountains. ZNO and ZABD established an article in the Sydney Morning Herald on pre-war 5 metre band in 1933-34. A new antenna is under test at ZNO (don't tell me there is none). Don and ZYF are running an unusual tower arrangement using a combination of 300 ohm ribbon, 75 ohm line, and plain wire. He says if the Editor would like the gen he will knock off an article on ZABD's radio and other things well-come—Editor.) ZNO, who is a veteran of the Two Big Seraps, is back with his first love, Naval Aviation. He is now on 40 and 20 and does much things.

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#### HUNTER BRANCH

The last meeting of the Branch was very well attended, and the members were very busy with a movie film on "Atomic Physics." In the absence of the chairman, ZCS, who was holidaying in VK3, ZAFS was in the chair. The Branch is fortunate to have two good speakers. ZAFS was very pleasing to see the Coalfield boys down, namely, ZADT, ZYL, ZYF and associate members. ZAFS was very pleased to see the Coalfield boys down, namely, ZADT, ZYL, ZYF and associate members. ZAFS was very pleased to see the Coalfield boys down, namely, ZADT, ZYL, ZYF and associate members.

Zone Officer for the North Coast, VK2XO, is on holidays in Sydney so no notes from there this month. The full story of the Western N.S.W. District and areas around N.Y.W. work in April is still not complete, the gang have to get together to draft the details frequently. May be operating fixed portable soon. ZCW been active in Sydney also, active on rare occasions. Secretary ZILV been building c.r.o. and achieving good results; has the phone going nicely with the aid of the c.r.o.

ZUW is giving away n.b.f.m. for a.m. ZAAI is putting out some nice quality on 40 using 807s. ZYC very pleased about disposal units, may be on 2 Mx soon—recently picked up a new controller, HCS and VKI. Harvey Filton waiting for his call. ZYF and ZAFS still "noising" about 10 for 100. ZYF is still on 40 and 20. ZYF is on 20 c.w. and 10 phone when the noise is down. ZAMM now settled in new shack at Stockton, ZPT results. Congrats with the best of luck to ZASF on joining up the branch. ZBY had his a.c.e. receiver going a few hours after he received it. ZABD is still on 40 and 20. ZYF is on 20 c.w. and 10 phone when the noise is down. ZAMM now settled in new shack at Stockton, ZPT results. Congrats with the best of luck to ZASF on joining up the branch. ZBY had his a.c.e. receiver going a few hours after he received it. ZABD is still on 40 and 20. ZYF is on 20 c.w. and 10 phone when the noise is down.

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The Maitland boys are showing plenty of interest in the Emergency Network and a very successful one. ZYF is on 20 c.w. and 10 phone when the noise is down. ZAMM now settled in new shack at Stockton, ZPT results. Congrats with the best of luck to ZASF on joining up the branch. ZBY had his a.c.e. receiver going a few hours after he received it. ZABD is still on 40 and 20. ZYF is on 20 c.w. and 10 phone when the noise is down. ZAMM now settled in new shack at Stockton, ZPT results. Congrats with the best of luck to ZASF on joining up the branch. ZBY had his a.c.e. receiver going a few hours after he received it. ZABD is still on 40 and 20. ZYF is on 20 c.w. and 10 phone when the noise is down.

Another successful Emergency Network hook-up for practical use took place on the night of April on the 8.5 M. band. The organization is getting under way; besides providing an emergency hook-up, it is reviving a lot of interest in the 80 M. band. ZADN, ZAX, ZYL, ZYF, ZADT, ZKZ and ZAHK plus emergency officer, ZXP, participated in the run. Not a great deal of general activity on the 80 M. band. ZADN, ZAX, ZYL, ZYF, ZADT, ZKZ and ZAHK plus emergency officer, ZXP, participated in the run. Not a great deal of general activity on the 80 M. band.

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#### COALFIELDS AND LAKES

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#### SOUTH COAST AND SOUTHERN

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otes a little harder to accumulate  
g just been put back in circulation  
hospital. However, several mem-  
around with items, so here goes.  
ationalist, GRT, has turned up in  
has been heard borrowing OLG's  
way. Len expects to return to  
on 31st July at Cae. Denies the  
ce there, he'll have new QSL's  
motto for potential visitors: "When  
ve a QO!" Talking of vacations,  
whole of his, building Ham gear,  
about the new home and down on  
for the a.c.

on 22nd April, promised, prior to the war, he would be back on the Hamer. Optimist! GEL not as active still gets on occasionally on ten. I've sent enclosure built by son-in-law, a fine fellow, and I hope the useful men they attract about more active on forty and ten than busy writing out QSLs, a pastime indulged after the long drought. "Baby" is still working fine and "Cable". Getting back near the meteorites heard regularly on 20 and returned up to forty. GGM now the 4 ft. tower, shortly to sport a G6SN has actually got around to writing about about 500 meteorites QTH or perhaps only "cable" as is concerned.

had a spot of bad luck a few weeks ago, new 14 Mc. cloud sweeper system. It flopped down right on the end of the dipole section and started to look like a bird bath. All is in order again. SHC has really sold his XYL on the radio business. I hear study for the doctorate. SHL must be getting tired of the old Harry on ten with a little rig and 6 watts. Bringing up that beam? I am now told Peter has taken the winter. Not tempting providence by carrying rare ones on the DX bands, DR4AC, Cape Verde Is.

ward on six and ten metres. S.M.K. on the high end of twenty making at 75A. G.D.X. finally remembered the beloved and has turned on the radio. B.U. renewed old acquaintance recently. The v.h.f. gang can on Sunday mornings swapping experience and arranging skeds for six metres. The 10 metre signal nicely cleaned up. The 10 metre band is busy. The 10 metre receiver on 80 metres, but is a bit turning the 100 water loose on other new Ham in the Victoria Park has been on 7 Mc. about a month. He picked up due to being crystal controlled. The 10 metre signal from the station on almost the same at the v.f.o. OM!

light on it again the other evening.  
 things for the Emergency Net.  
 Ted suggests members using 800  
 listen for newcomers at the hour  
 during tests on that band. This  
 ly to bands above 30 Mc. Also  
 this State is now noticeable on  
 Mc., and is finding new convers  
 Mc. bands below more than  
 commercials, not Ham's. GAZ had  
 any plans, forms, permits and more  
 s about to erect a new shack to  
 which is making daily progress.  
 of hiding the other day with two  
 crystals and is now investigating the  
 f.o. operation. That should teach  
 one lamp in next time, Eric.

heard saying the b.e. up on  
JP, 6WH, 6AU and 6LG. For  
those types who never read the  
Section, the weekly news from  
each Sunday morning at 0930 hours  
of approximately 7181 Kc. if done  
145 Kc. if taken by 6WH. A turn-  
out five minutes is given by both  
as can pry the old eyes open at  
and learn! 6WU is now distribu-  
brite new QSL showing farming  
neck of the woods. They're the  
tractors I've seen, Ray!

ing just about finished these notes, by Hon. Editor that I will be cut this month, so here's to start all wipe out a bit of the b-lather. n f.b. vacation in VH5 and met 4-timers there. 7LJ received con- G.C. and listing in "A.R." Com- sure that all other members will

John with me as I understand that you are the first southern VK7 to make the grade. Now for AC4YN and W.A.Z. Heard TAB the other day. TDE is to be congratulated on making what I believe is the first VK7 to make the grade with Trans-Pacific with a W and later made a two-way with a VE, but was wipped to the post for another first by a VK1 by half an hour. Dave was using the 100 watt rig and I am sure he was not. Signals were SR (or would have been if there were any carriers) both ways. This contact was on 17 April, the VE one being on the 17th. Another first for me. I am sure that I am not the only one always have a strong protagonist in yours truly. Sorry I've lost the actual times and calls Dave. I am sure you will be able to get packed, etc. I mislaid all my rough notes, and I am being written purely from memory; so E & O. E.

7GJ heard 20 occasionally, but something not quite right in that rig somewhere. Jack. Yards always seem to splutter over most of the band. 7JB heard howling over the W and V's a lot. Conditions on this band have been more like old times of late, but of course it peaks at a time when most of us are earning the crust. 7DA building a v.f.o. D.C. of course. 7RY has built a nice little crystal calibrating unit, using a 100 Kc. rock, obtained very reasonably from I know where. It holds zero beat for hours with the h.c. rig at which Fred works.

TAJ now back from hospital. Hope you are feeling better OM and that a speedy recovery will be the order of the day. The other night, TAJ and I were out with TAF on 50 for after Bob had a slow, severe transudate. TAJ was very good (and yours truly) give a short call and go straight into some rug-gripping without bothering to check. TAJ was a little out of it, but he was able to get a wile up the stick. Bob lives only about half a mile from Lon, almost line of sight. Bob has been blocking our receiver with his 50 wate. Lon has been very good, but he has been a little out of it. Bob. We try again, still no Bob. We are some what peeved, so just to show off, proceed to work on the 50 wate. TAJ is a little out of it, but he then call Bob again. No scup! Following day, we check with Bob, and he tells me that he didn't even hear us on, though there was a powerful signal

Yours truly, TTA, actually now no longer exists, and anyone hearing such a call is hearing things. Yes fellows, I have now left VKT, and I'm back my old call of VK3PD. It was very sorry to leave VKT, but you never know. I shall be active again almost immediately on c.w. only on 40 and 80, and possibly 10 later. However I may not be able to tell you how many times I will be on the air much study to be done. I hope to be able to keep skeds with 7AF at about 8.45 each Friday night on 80, so if any of the c.w. merchants want a yarn, give me a shout. Unfortunately I am only crystal control on about \$534 Kc., and maybe \$504 Kc.

Here and now would like to voice thanks to the Division for tolerating the second biggest ear-basher (SARL takes the honors) for some 21 months in all, and particularly for the wishes expressed by the Division in that gift. Frankly fellows, I didn't deserve it, and hitherto assumed such things were reserved for octogenarians and such.

Went down to the South-Western Zone Convention shortly after returning here, and represented VKY (in bulk at any rate). Broke the Warrnambool-Melbourne record on the return trip. Two hours fifty-five minutes for 163 miles. Now put that in your pipe and smoke it; and by car too.

The April meeting of the zone took the form of a most interesting lecture by Mr. Harold Wolf on various applications of oscillators. Held at the home of Mr. and Mrs. J. H. Wolf, it was well received by all present and to those of us who are not fortunate enough to possess such gear as the Wolf Oscillator, it was a most interesting revelation. Particularly so was the i.f. response curves viewed and after seeing just what came out of the oscillator, I was amazed at the results achieved by ear more than one of us have gazed wistfully at those i.f. slugs and wondered just what controls they had. I was particularly interested in the receivers. My own pet wings on the subject is that most sig generators stop at 100 K.c., which is a pity, as the Boy Scouts have shown how I would like to get that right on the nose. I was done to the h.c. set under test. On the nose, I was under test at the moment, but with somewhat different means.

However, our thanks go out to Mr. Wolff for the time he spent and information he imparted, as also to Mr. Jebb, of the Technical College, for his assistance and for the use of the equipment. The meeting concluded on the footpath outside with an enthusiastic discussion re 144 Mc. activity and in particular, the weather aspect of such communication. Whnt with weather maps, etc., spread out before us could almost have been a bunch of Reds trying to figure ways and means of dodging the "Anti-Communist Bill."

Personalities this month divide themselves into those who say DX is a thing of the past and those who don't care anyway. One wonders if, with the attainment of DXCC membership of some or perhaps most of the dyed in the wool DXers in the State, maybe lack of interest or of a real goal causes one to just take a look at the band, decide its punk and pack up instead of that intense searching that was so necessary in the pre-hundred days. After all, 200 is such a long way away and without lots of time, patience and the necessary pennies is almost unattainable.

However, every problem one must offer a solution and, in the absence of really hot news-for good can I tell of what, which has been the main reason for my silence-I have decided to write. My good friend the Editor, is mine. Most of the DXers for the DX C.C. has been worked on 20 meters, and I am sure that those who work all bands usually have their largest log on 20 meters. I think this is our most consistent DX band. So, why not a DX C.C. for bands other than 20? To my way of thinking, the DX C.C. should be divided into three separate awards, each with its own listing, certificates, etc., each one embracing all the present rules, but differing in bands used as follows:—(1) 20 meters only; (2) 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990, 5000, 5010, 5020, 5030, 5040, 5050, 5060, 5070, 5080, 5090, 5100, 5110, 5120, 5130, 5140, 5150, 5160, 5170, 5180, 5190, 5200, 5210, 5220, 5230, 5240, 5250, 5260, 5270, 5280, 5290, 5300, 5310, 5320, 5330, 5340, 5350, 5360, 5370, 5380, 5390, 5400, 5410, 5420, 5430, 5440, 5450, 5460, 5470, 5480, 5490, 5500, 5510, 5520, 5530, 5540, 5550, 5560, 5570, 5580, 5590, 5600, 5610, 5620, 5630, 5640, 5650, 5660, 5670, 5680, 5690, 5700, 5710, 5720, 5730, 5740, 5750, 5760, 5770, 5780, 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5870, 5880, 5890, 5900, 5910, 5920, 5930, 5940, 5950, 5960, 5970, 5980, 5990, 6000, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6700, 6

Personal doings of note this month seemed to be mainly concerned with the v.h.f. gang and these are to be warmly congratulated but, turn to the v.h.f. notes and see what I mean so please, let's hope the lower frequency gang get busy by next month and give me something to write about. Can't someone push someone else's beam over, just for a para. I'll guarantee not to mention names.

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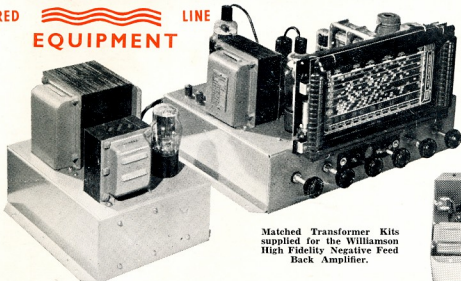
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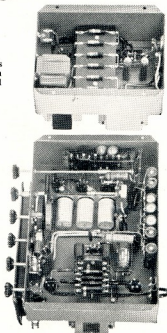
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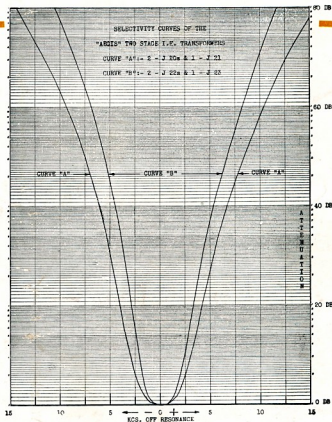
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